

*Abies grandis* Lindl. (Giant or Grand Fir) —

## A Lepidopterous Pabulum

By Dr. JOHN R. LANGMAID\*

During the winter of 1976-7 I discovered a small, twenty-year-old plantation of *Abies grandis* in Havant Thicket, Hampshire, and decided to try and find out whether it supported any lepidoptera. A telephone call to the Forestry Commission revealed a large and more mature plantation near Braishfield, Hants., several smaller and younger plots in the New Forest, and a double row of mature trees near Madehurst, West Sussex.

*Abies grandis* was first introduced into this country from North America in 1833, and has now been quite extensively planted throughout the country, though usually in small plots. It can grow to a height of 170 ft. The branches are flat, and borne in widely-spaced whorls. The needles are flat, about two inches long, bright green above, with two whitish bands below, and notched at the tips. The bark is smooth and dotted with blisters which contain resin. The male flowers are yellow and grow in clusters on the underside of the branches. The female flowers are erect and grow high up on the tree. Other species of *Abies* are not so favoured by the forestry industry, though *Abies procera* (Noble Fir) is planted in the North and West. *Abies alba* does not thrive here owing to the depredations of a needle-sucking aphid.

Several visits were made to these localities in April and May 1977, when the following species were noted.

*Epinotia subsequana* Haw. I took a fresh male in Havant Thicket on 30th April and immediately phoned the late Mr. D. W. H. fennell, who came over the following day when we found only one further specimen. I gave Mr. fennell a map reference for the Braishfield locality which he visited on 6th May. He phoned me that evening to report that the moth was extremely abundant there, and that he had also taken several *Epinotia fraternana* Haw. (see below). Dr. M. W. Harper was staying with me at the time, and we called at Braishfield on our way to Ledbury on 8th May. It was a warm, sunny afternoon, and we were astonished to see hundreds and hundreds of small whitish moths flying in swarms around the branches of the fir trees. Most were out of reach, but, even so, it was possible to get as many as a dozen *subsequana* in the net with a single swipe. A few days later I took one and saw several more in the *Abies grandis* plantation in Haugh Wood, Herefordshire. Further visits to Havant Thicket and Madehurst later in the month confirmed that the moth is well-established in both places, though in nowhere near the abundance as at Braishfield. According to both Meyrick and Ford the food-

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plant is spruce, but I have never found it in any of the many spruce plantations I have visited.

*Epinotia fraternana* Haw. This appeared to be fairly common at Braishfield in early May, but did not appear in Havant Thicket until toward the end of the month when it was found quite commonly. Dr. Harper had found the moths commonly in 1976 in Haugh Wood, netting them after tapping the branches. He had also found the larval spinings whose description agreed with the empty spinings I had found in abundance in Havant Thicket. It seems that the larva spins two needles together in parallel and another two crosswise, in the form of a frame for a game of noughts and crosses, then mining the needles. Ford gives the foodplant as spruce, and Meyrick says *Pinus picea* (he calls spruce *Pinus abies*). .....

*Pammene ochsenheimeriana* L. & Z. In mid-April I found full-fed larvae in aborted buds of *Abies grandis* in Havant Thicket. They pupated within the buds, and emerged at the end of April and in May. Meyrick merely says "on *Pinus*", and Ford says "on *Pinus sylvestris*".

*Ditula angustiorana* Haw. Larval spinings were common in Havant Thicket, the larva mining the needles.

*Blastobasis lignea* Wals. Larvae were abundant in April feeding in spun dead needles, debris from other trees that had fallen on to the flat branches of the fir, and also in bird droppings.

*Brachmia gerronnella* Zell. One was bred from a twig gall. Presumably it was an inquiline feeding on the dead wood.

*Abies grandis* is a pabulum for several species previously considered to be uncommon, and it would be well worthwhile for further studies to be made in plantations of this tree throughout the country.

### References

- Ford, L. T., 1949. *A Guide to the Smaller British Lepidoptera*. London.  
 Meyrick, E., 1928. *A Revised Handbook of British Lepidoptera*. London.  
 Randall, R. E., 1973. *Trees in Britain—Conifers and Allies*. Jarrold, Norwich.

EUROIS OCCULTA (L.) AND LITHOPHANE LEAUTIERI (BOISDUVAL) IN HERTFORDSHIRE. — On the night of 16th-17th July, 1977, I took a worn male specimen of *Eurois occulta* (L.) in the m.v. trap in my garden. There were few other occupants of the trap that night and their identity did not suggest any particular migratory occasion. The specimen appeared similar to the mid grey form associated with Scottish specimens.

A second moth of interest which I found in the trap on the night of 14th-15th October was a male *Lithophane leautieri* (Boisduval). Though not the first record for Hertfordshire, it seems a new arrival on the north-eastern side of the county. — D. E. WILSON, Joyce House, Green Tye, Much Hadham, Hertfordshire.